New Zealand Users Workshop

Australian Synchrotron

4-5 September 2003

Lecture Theatre 1.439
Ground Floor
School of Engineering
The University of Auckland
20 Symonds Street, City

Victoria
The Place To Be

MINISTRY OF RESEARCH, SCIENCE & TECHNOLOGY
TE MANATŪ PŪTAIAO

THE UNIVERSITY OF AUCKLAND
NEW ZEALAND

A new tool for New Zealand Science

The Victorian Government is building Australia's first dedicated synchrotron facility at Monash University in Melbourne. This leading edge machine will be a regional asset, giving New Zealand's R&D community access to a convenient synchrotron light source for the first time.

Synchrotron techniques are becoming ever more essential across a vast range of science, including protein crystallography, medical imaging and microbeam radiotherapy, forensics, new materials, environmental research and a myriad other applications. Synchrotron light is speeding up biotechnology R&D and is a fundamental enabler for nanotechnology.

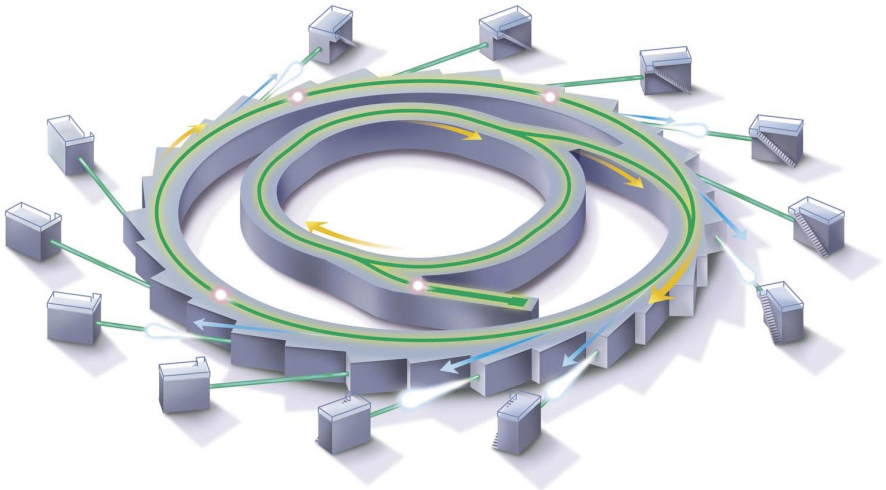
The Australian Synchrotron presents an unparalleled opportunity to perform unique research, and we all have an interest in making the most of this new facility.

This workshop is your chance to hear more about what the Australian Synchrotron can do for your research, and to make your contribution to shaping New Zealand involvement in this exciting project.

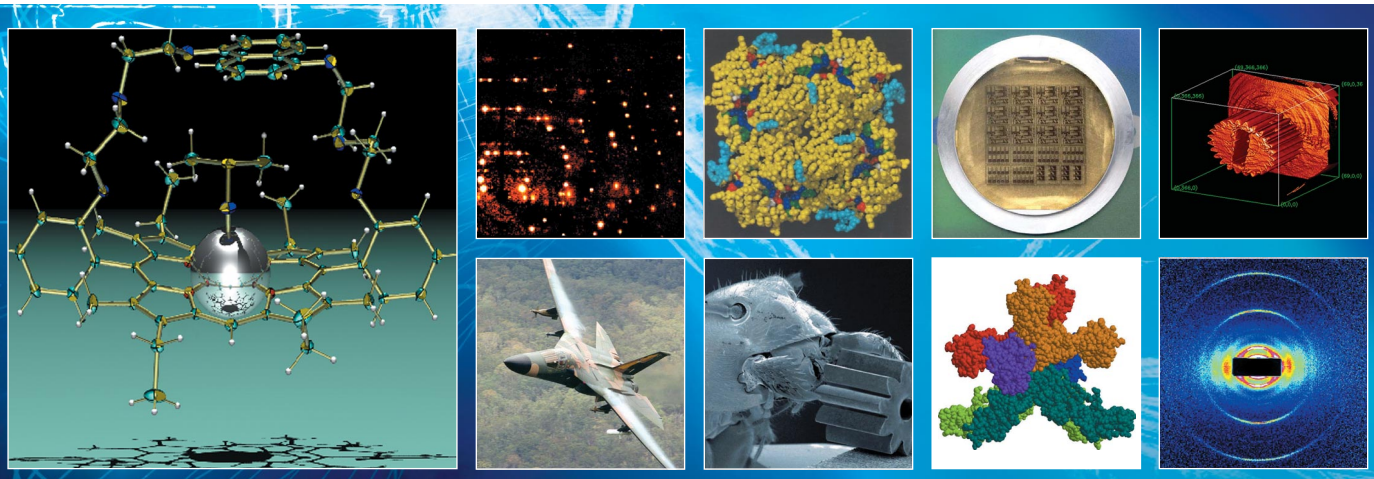
The New Zealand Ministry of Research, Science and Technology, the Victorian Government and the University of Auckland welcome you to this special workshop for New Zealand scientists.

Workshop Objectives

- Inform current and potential New Zealand users of synchrotron radiation of the progress and potential capabilities of the Australian Synchrotron.
- Provide a forum for synchrotron users to meet, share information and network with local and Australian colleagues.
- Discuss the possible roles New Zealand might play in development of the Australian facility.
- Consider establishment of an Institute of Synchrotron Science as an umbrella organisation to foster New Zealand participation in the international synchrotron community.



Stylised illustration of the 3GeV Australian Synchrotron due for completion in 2007.



Program

Thursday 4 September

9.30 am	Welcome/introduction	Dr John Hood, Vice Chancellor, University of Auckland
9.40	**What is a Synchrotron? the Australian project**	Prof Frank Larkins, Chair, Australian Synchrotron National Scientific Advisory Committee
10:10	**Synchrotrons – the Taiwan experience and the international picture**	Dr Keng Liang, Deputy Director, National Synchrotron Radiation Centre, Taiwan
11.00	**Morning tea**	
11.30	**Australian Synchrotron Research Program**	Dr Richard Garrett, Australian Nuclear Science & Technology Organisation
12 noon	**Boomerang machine**	Alan Jackson, Technical Director, Australian Synchrotron Project
12.30 pm	**Lunch**	
1.30	**Beamline proposals**	Richard Garrett
2.00	**Project update**	Max Roger, Director, Australian Synchrotron Project
	Synchrotron applications	
2.15	• Infrared spectroscopy	Prof Graham Bowmaker, University of Auckland
2.45	• Large molecule crystallography - international	Dr Aina Cohen, Stanford Synchrotron Radiation Laboratory, USA
3.15	**Afternoon tea**	
3.45	• Large molecule crystallography - NZ	Prof Ted Baker, University of Auckland
4.15	• X-ray imaging	Prof Keith Nugent, University of Melbourne
4.45	• Soft X-ray surface spectroscopy	Prof Rob Lamb, University of New South Wales
5.15	**Break**	
5.30–7	**Reception**	

Friday 5 September

9.00 am	**NZ user community overview**	Prof Jim Metson, University of Auckland
	Synchrotron applications (continued)	
9.10	• X-ray absorption studies of battery materials	Jim Metson
9.30	• X-ray scattering & photoemission	Dr James Downes, Boston University, USA
9.50	• XANES & EXAFS of semiconductor films	Dr Ben Ruck, Victoria University Wellington
10.10	**Morning tea**	
10.30	Analysis & use of high Tc superconductors	Dr Jeff Tallon/Dr Donald Pooke, Industrial Research Ltd
11.00	• Medical physics	Dr Stéphanie Corde-Tehei, Waikato Hospital
11.30	• Crystallography in biochemistry	Prof Geoff Jameson, Massey University
12.00 noon	**Potential models for NZ involvement in Australian Synchrotron**	Lia Haar, Ministry of Research Science and Technology
12.20 pm	**Where to from here?**	Jim Metson
1.00	**Lunch**	

Accommodation

The Hyatt, corner of Waterloo Quadrant and Princes Street, City is offering the preferential rate of $123.75 (GST incl.) per night. Quote "Synchrotron Workshop" when booking. Ph 13 1234 or +64 9 355 1234

Transport

Auckland Airport is approx 25-30 minutes drive from the University and central City. Taxis cost approximately $40. Shuttle buses cost around $15 but may not travel directly to the City.

Parking

Street parking is difficult close to the University, including weekends, with short term metered spaces in high demand. Nearest parking buildings are at 56 and 70 Wakefield Street, 1 minute from the workshop venue

Catering

Lunch and morning and afternoon tea will be served in the foyer outside the Lecture Theatre

Reception

The reception will be held in the Federation Room of Old Government House in the University grounds, corner of Princes Street and Waterloo Quadrant, a 3 minute walk from the School of Engineering.

Contacts

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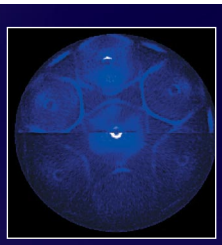
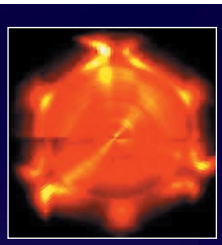
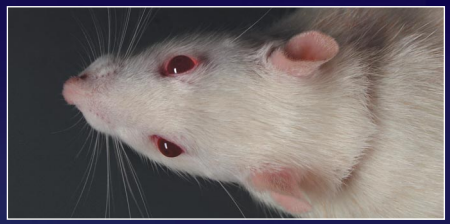
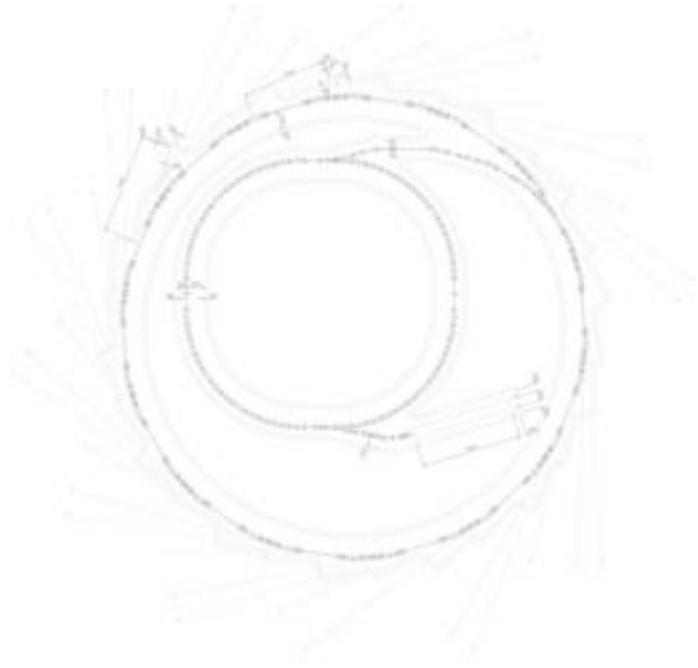






Artist's impression of the Australian Synchrotron building.



Australian Synchrotron – New Zealand Users Workshop

Registration Form C2729 – Tax Invoice GST 10 - 010 - 381
Registration costs NZ$50. Please register by 22 August 2003.
No registrations will be accepted on the day.

Email: mt.millet@auckland.ac.nz
Fax: ++ 64 9 373 7419
Post: Marie-Therese Millet, Centre for Continuing Education, University of Auckland,
Private Bag 92019, Auckland

Please register me for the Australian Synchrotron New Zealand Users Workshop

Title ..... Surname ..... First Name .....

Position.....

Company/Organisation.....

Mailing Address.....

.....

Phone: ..... Fax: ..... Email: .....

☐ Enclosed is my cheque for NZ$50 made payable to The University of Auckland

☐ Please charge NZ$50 to my credit card

☐ Mastercard ☐ Visa

Card holder's name..... Card number.....

Expiry date..... Signature .....

☐ I would like to go on your email mailing list to be kept informed about the Australian Synchrotron project

☐ I will attend the workshop reception

☐ I will bring a guest to the reception (no charge) Name of guest.....

Special dietary requirements.....

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